



Westhill High School  
125 Roxbury Road  
Stamford, Connecticut

## **Mold Growth Removal Work Plan**

December 4, 2018

Project No. 28-2087-033

**Tighe & Bond**

**Cover Page**

Introduction .....	1
Contractor Requirements .....	1
Regulations .....	1
Description of Work .....	2
Submittals.....	3
Products .....	3
General .....	3
Equipment.....	4
Microbial Cleaning Disinfectant.....	4
Personal Protection Supplies and Equipment.....	4
Pre-Construction Meeting .....	5
Work Area Preparation.....	5
General .....	5
Work Area Preparation.....	5
Work Procedures.....	5
Consultant Responsibilities .....	6
Visual Inspections .....	6

## **Introduction**

- A. This Mold Growth Removal Work Plan (the "Plan") has been developed to facilitate the removal and/or cleaning of visibly mold impacted items and surfaces at Westhill High School located at 125 Roxbury Road in Stamford, Connecticut, Connecticut (the "site").
- B. The Plan includes the following:
  - 1. Preparation of Work Area
  - 2. Removal or Cleaning and Disinfecting of Hard Surfaces
  - 3. Inspection a by Tighe & Bond, Inc. (the "Consultant").
- C. The Plan includes the following areas:
  - 1. Rooms 606, 607 and 609
  - 2. Room 511
  - 3. Rooms 402 and 431
  - 4. Rooms 214, 222, 223, and 224
  - 5. English Department Faculty Room and Department Head Office
  - 6. Rooms 5, 8, and 11.

## **Contractor Requirements**

- A. The Contractor(s) shall have a designated "competent person" on the site always to ensure establishment of a regulated area and proper work practices throughout the Project.
- B. Supervisor(s) shall be thoroughly familiar and experienced with mold remediation and related work and shall enforce the use of all safety procedures and equipment. Supervisor shall be knowledgeable of EPA, OSHA, and NIOSH requirements and guidelines.
- C. Contractor shall enforce strict discipline and good order among its employees and shall not employ any person not skilled in the work assigned.
- D. The Contractor shall properly coordinate work with the Owner and Consultant.
- E. The Contractor shall be responsible for addressing any concerns by the Owner and/or Consultant.

## **Regulations**

- A. The Contractor shall be solely responsible for conducting this project and supervising all work in a manner that will be in conformance with all federal, state, and local regulations and guidelines pertaining to mold impacted surfaces remediation.
- B. Specifically, the Contractor shall comply with the requirements of the following:
  - 1. Environmental Protection Agency (EPA) "Mold Remediation in Schools and Commercial Buildings", September 2008.

2. Occupational Safety and Health Administration (OSHA) Regulations for Construction (29 CFR 1926).
3. Institute of Inspection, Cleaning and Restoration Certification (IICRC) S500 "Standard and Reference Guide for Professional Water Damage Restoration", 4th Edition 2015.
4. IICRC S520 "Standard and Reference Guide for Professional Mold Remediation", 3rd Edition 2015.
5. 2003 International Building Code as adopted by the 2005 State of Connecticut Building Code including the 2009, 2011, and 2013 amendments;
6. Life Safety Code, National Fire Protection Association (NFPA);
7. Local health and safety codes, ordinances or regulations pertaining to mold remediation and all national codes and standards including American Society of Testing and Materials (ASTM), American National Standards Institute (ANSI), and Underwriter's Laboratories (UL).

## **Description of Work**

A. The City of Stamford (the "Owner") requires the removal or cleaning of visibly mold-impacted items and surfaces in the following areas within the building:

1. Rooms 606, 607, and 609
  - a) Clean Diffusers and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide
  - b) Clean Adjacent Ceiling Tiles (Remove Ceiling Tiles if Uncleanable)
2. Room 511
  - a) Remove Mold Impacted Pipe Insulation in Two Locations
  - b) Clean Diffusers and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide
  - c) Clean Adjacent Ceiling Tiles (Remove Ceiling Tiles if Uncleanable),
3. Rooms 402 and 431
  - a) Clean Unit Vent, Perimeter Radiator, and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide
4. Room 214
  - a) Clean Diffusers and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide
  - b) Remove Water Stained Ceiling Tiles
5. Room 222
  - a) Remove Mold Growth-Impacted and Water Stained Ceiling Tiles
  - b) Clean Unit Vent, Perimeter Radiator, and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide

6. Room 223

- a) Remove Mold Growth-Impacted and Water Stained Ceiling Tiles,
- b) Clean Unit Vent, Perimeter Radiator, and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide

7. Room 224

- a) Clean Unit Vent, Perimeter Radiator, and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide

8. English Department Faculty Room and Department Head Office

- a) Clean Diffusers and Return Air Grills with HEPA Vacuums and EPA-registered Fungicide
- b) Remove Water Stained Ceiling Tiles

9. Room 5

- a) Clean Light Protective Covers

10. Room 8 and 11

- a) Remove Water Stained Ceiling Tiles

## **Submittals**

- A. The Contractor will submit one copy each (electronic submittal is preferred) of the following submittals to the Consultant prior to the commencement of Work:
  - 1. Respirator fit-test records and medical records of each employee who may be on the project site.
  - 2. Connecticut-license for an Electrical subcontractor (if needed).
  - 3. Chain of command for Contractor consisting of name and cell phone numbers for Project Manager and Supervisor(s) assigned to the Project.
  - 4. Copies of Safety Data Sheets (SDS) for materials to be used on-site.

## **Products**

### **General**

- A. Deliver all materials in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name and product technical description.
- B. Damaged or deteriorated materials shall not be used and shall be removed from the premises.
- C. Polyethylene (poly) sheeting in a roll size to minimize the frequency of joints shall be delivered to the site with factory label indicating 4-mil in thickness.
- D. Tape or adhesive spray will be capable of sealing joints in adjacent poly sheets and for attachment of poly sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of microbial cleaning disinfectant.

**Equipment**

- A. The Contractor shall provide all clean tools and equipment necessary for the work.
- B. The Contractor shall have available sufficient inventory for materials necessary for the job including protective clothing, respirators, filter cartridges, poly sheeting of proper size and thickness, tape, and air filters.
- C. The Contractor shall assist the Consultant by providing necessary tools and equipment (e.g., coveralls, extension cords, lighting, etc.) for the Consultant to conduct visual inspections on cleaned and disinfected hard surfaces.
  - 1. The Consultant reserves the right to reject such items that are deemed unsafe and/or do not function properly and request items be replaced with adequate replacements. The work areas shall be safe to enter/occupy by the Consultant.
- D. Vacuum units, of suitable size and capacities for the project, shall have HEPA filter(s) capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter or larger.
- E. Exhaust air filtration system units shall contain HEPA filter(s) capable of sufficient air exhaust to create negative air pressure of - 0.02 inches of water column within the enclosure with respect to outside area.
  - 1. Adequate exhaust air shall be provided for a minimum of four (4) air changes per hour within the cleaning area.
  - 2. No air movement system or air filtering equipment shall discharge unfiltered air outside.
  - 3. The Contractor will have reserve units so that the station system will operate continuously.
- F. The Contractor shall provide adequate lighting to allow for appropriate cleaning and disinfecting of items and passage by workers and visitors.
- G. The Contractor shall provide wash station and plumbing to support including sufficient hose length and drain system or an acceptable alternate for the employee decontamination unit.

**Microbial Cleaning Disinfectant**

- A. Disinfecting products shall include the two-part Anabec Cleaning Solution and Anabec X-70 manufactured by Anabec, Shockwave RTU manufactured by Fiberlock, or equivalent, accepted by Consultant.

**Personal Protection Supplies and Equipment**

- A. Respirator Types - Provide all workers with a half-face air-purifying respirator that is approved by the National Institute for Occupational Safety and Health (NIOSH) for protection against airborne mold and microbial cleaning disinfectant and meets the requirements of the OSHA Standard.
- B. Protective Clothing - Provide all workers and approved visitors with disposable coveralls, head and foot coverings, gloves, eye protection (i.e., goggles), and half-face respiratory protection.

## **Pre-Construction Meeting**

- A. Prior to the start of work, a Pre-Construction Meeting will be scheduled and must be attended by the Contractor and any Sub-Contractors. The assigned Contractor Project Manager and Site Supervisor must also attend this meeting.

## **Work Area Preparation**

### **General**

- A. Prior to work area preparations, it shall be the responsibility of the Owner to remove the mold impacted metal sprinkler head caps from the fire sprinkler lines and store them inside the classrooms. The Contractor shall visually inspect the sprinkler head caps prior to cleaning/disinfecting activities and bring any damaged caps to the attention of the Consultant.

### **Work Area Preparation**

- A. Install one-layer 4 mil thick poly sheeting on floors directly below the affected areas where mold growth-impacted and/or water stained ceiling tiles are scheduled for removal and/or cleaning.
- B. Install one-layer 4 mil thick poly sheeting on floors directly below the affected areas where air grills and adjacent ceiling tiles are scheduled for cleaning.
- C. Install one-layer 4-mil thick isolation barriers, negative pressure, and wash station in areas where pipe insulation is scheduled for removal. Install one-layer 4-mil thick poly sheeting on floors within isolation barriers

## **Work Procedures**

- A. Work will not commence until work area preparations are complete and authorized by the Consultant.
- B. Following authorization to proceed, air grills and adjacent acoustical ceiling tiles scheduled to be cleaned will be cleaned with HEPA vacuums and wet wiping.
  - 1. If acoustical ceiling tiles cannot be cleaned, the tiles shall be removed.
- C. After removal of the mold-growth impacted building materials and in accordance with manufacturer's directions and specifications, utilize the Consultant-accepted cleaning disinfectant to clean, disinfect and sanitize surfaces.
  - 1. Contractor shall follow manufacturers recommended number of applications, drying times, etc.
- D. The work area shall be routinely cleaned during the Contractor's work.
  - 1. Cleaning disinfectant, rags, PPE, etc. generated during cleaning/disinfecting shall be routinely containerized within the enclosure for disposal.
  - 2. When a waste bag is full, it shall be securely sealed with tape and cleaned before removal from the work area/

## **Consultant Responsibilities**

### **Visual Inspections**

- A. The Consultant shall conduct periodic inspections throughout the project. Inspections shall be conducted to document the progress of the work as well as the procedures and practices employed by the Contractor.
- B. The Consultant shall perform the following inspections during the work:
  - 1. Pre-commencement Inspection. Pre-commencement inspection shall be performed at the time requested by the Contractor. If, during the pre-commencement inspection, deficiencies are observed, the Contractor shall perform the necessary adjustments to obtain compliance.
  - 2. Work Area Inspections. Periodic work area inspections shall be conducted at the discretion of the Consultant. During the work area inspections, the Consultant shall observe the Contractor's work procedures, verify work area integrity, assess project progress, and inform the Contractor of specific items if deficiencies are noted.
  - 3. Final Visual Inspections. The Consultant, upon request of the Contractor, shall conduct final visual inspection of the surfaces cleaned. If items are determined to contain dust and/or debris, the items shall be recleaned/disinfected by the Contractor.

J:\S\S2087 Stamford\033 Mold Remediation  
Consulting\Sites\Westhill\Work\_Plan\SAOC\_Work\_Plan\_KJM\_2018-1204.docx